



# A STUDY ON LEARNING STYLES AND THEIR IMPACT OF SCIENCE TEACHING AMONG PRIMARY SCHOOL STUDENTS

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## ABSTRACT

Nowadays, individual differences are seen as important components in learning. They also affect teaching and learning processes in terms of teachers and students. Learning styles is another accentuated element in point of individual differences. One of the most important uses of learning styles is that it makes it easy for teachers to incorporate them into their teaching. There are different learning styles. Three of the most popular ones are visual, auditory and kinaesthetic. Some students are visual learners, while others are auditory or kinaesthetic learners. While students use all of their senses to take in information, they seem to have preferences in how they learn best. In order to help students learn, teachers need to teach as many of these preferences as possible. Teachers can incorporate these learning styles in their curriculum activities. So that students are able to succeed in their classes. A review of the literature will determine how learning styles affect the teaching process. In this study analysis the learning styles and their impact of science teaching from 100 primary school students in Karaikal district. The findings showed that most of the students preferred learning style was visual. The purpose of this study is to increase Teachers awareness and understanding of the effect of learning styles on the teaching process.

**KEYWORDS:** Learning styles, Science Teaching, Primary School Students.

## INTRODUCTION

Every individual can learn but rate of learning varies from person to person. According to Ozden (1999) studies have shown that individual's learning rates, their capacities and styles are different from each other. In order to achieve the ultimate goal of student learning it is important to use a combination of science teaching methods and to make the classroom environment as stimulating and interactive as possible. Students learn in many different ways. Some students are visual learners, while others are auditory or kinaesthetic learners. Visual learners learn visually by means of charts, graphs, and pictures. Auditory learners learn by listening to lectures and reading. Kinaesthetic learners learn by doing. Students can prefer one, two, or three learning styles. Because of these different learning styles, it is important for teachers to incorporate in their curriculum activities related to each of these learning styles so that all students are able to succeed in their classes. While we use all of our senses to take in information, we each seem to have preferences in how we learn best.

## DEFINITION OF LEARNING STYLES

Learning styles may be defined in multiple ways, depending upon one's perspective. Brown (2000) defines learning styles as the manner in which individuals perceive and process information in learning situations. He argues that learning style preference is one aspect of learning style and refers to the choice of one learning situation or condition over another.

In this study, the researcher discusses the definition of learning styles, Impact of science teaching through visual, auditory and kinaesthetic learning styles among primary school students in Karaikal District will be discussed.

## OBJECTIVES OF THE STUDY

- To find out the Significant difference between the mean scores of learning styles of Primary school students in terms of their sex, Locality of school and Parental Education.

- To find out the significant difference between the mean scores of impact of science Teaching of Primary school students in terms of their sex, Locality of school and Parental Education.

## HYPOTHESES OF THE STUDY

- There is no significant difference between the mean scores of learning styles of Primary school students in terms of their sex, Locality of school and Parental Education.
- There is no significant difference between the mean scores of impact of science Teaching of Primary school students in terms of their sex, Locality of school and Parental Education.

## REVIEW OF RELATED LITERATURE

Huseyin (2012) made a study on "The Relationship between the Learning Styles of Students and Their Attitudes towards Social Studies Course". The result revealed that the objective of the study is to determine the relationship between the attitudes of primary school students towards social studies course and their learning styles and to put forth the change between their learning styles and attitudes towards social studies course according to their classes. Descriptive scanning model has been used in the study. The research group consists of 320 primary school students. Perceptual Learning Style Preference Survey and Attitude Scale for Social Studies Course have been used as data acquisition tools. In addition, whereas there is a statistically significant difference between the auditory kinesthetic and tactile learning styles between classes, no difference has been determined between other learning styles.

Dr. Oluwatomi (2014) studied on "A Comparative Study of Chemistry Students' Learning Styles Preferences in Selected Public and Private Schools in Lagos Metropolis". This study investigated the learning style preferences of chemistry students in both public and private secondary schools in Lagos metropolis, Nigeria. Descriptive research survey design was adopted for this study. The sample consisted of two hundred (200) SS 2 Chemistry students. The participants were selected using hat and draw and disproportionate

stratified sampling methods. The result showed that there is a significant relationship between learning style preferences of students and their performance in the chemistry achievement test in both public and private schools. Visual learning style was the predominant preference among students in both school types. The researcher recommends that chemistry teachers should use a variety of teaching styles to accommodate the various learning styles of their students. An alignment between teaching and learning styles will improve the teaching, learning and performance of students in Chemistry.

### SAMPLE SELECTION AND DATA COLLECTION OF THE STUDY

The investigator has chosen Randomly 100 students from various primary schools in Karaikal District for the Investigation. Stratified Random sampling was applied. The investigator personally visited schools with permission of the Headmasters of the schools. The teachers who attended to the school on the day of collection of data are considered for the purpose of the investigation. It was provided to the concerned teachers of the schools. The data on each variable in the investigation is properly coded to suit for the analysis.

### METHODOLOGY OF THE STUDY

Normative Survey method of research way employed to investigate the Learning styles and their impact of science teaching of the study.

#### Data Analysis

##### Hypothesis: 1

There is no significant difference between the mean scores of learning styles of Primary school students in terms of their sex, Locality of school and Parental Education.

Table: 1

Variable	Category	Sub group	N	Mean	S.D	t-value	Level of significant.
Learning Styles	sex	Male	50	87.26	5.64	0.558	Not significant at 0.05 level.
		Female	50	87.86	5.7		
	Locality of School	Rural	60	84.32	4.53	4.89	Significant at 0.01 level.
		Urban	40	89.73	5.94		
	Parental Education	Educated	54	85.24	5.26	1.14	Not significant at 0.05 level
		Un-Educated	46	86.63	6.73		

From the Table :1 , it is found that the calculated t- value (0.558) is less than the table value 1.96 at 0.05 level of significance. The mean scores of male and female students has equal life styles. Then the calculated value 4.89 is greater than table value 2.58 at 0.01 level of significance. The mean scores of urban area students are greater than the rural area students in respect to their locality of school. The mean scores of life styles of uneducated parents (86.63) are greater than educated parents (85.24). Hence it is concluded that there is a significant difference between the mean scores of learning styles of Primary school students in terms of their sex, Locality of school and Parental Education.

##### Hypothesis: 2

There is no significant difference between the mean scores of impact of science Teaching of Primary school students in terms of their sex, Locality of school and Parental Education.

Table:2

Variable	Category	Sub group	N	Mean	S.D	t-value	Level of significant.
Impact of Science Teaching	Sex	Male	50	83.62	5.46	0.724	Not significant at 0.05 level.
		Female	50	84.43	5.73		
	Locality of School	Rural	60	83.28	5.03	2.74	Significant at 0.05 level.
		Urban	40	86.52	6.24		
	Parental Education	Educated	54	83.56	6.47	1.37	Not significant at 0.05 level
		Un-Educated	46	85.37	6.70		

From the Table: 2, it is found that the calculated t- value (0.724) is less than the table value 1.96 at 0.05 level of significance. The mean scores of male and Female students has equal impact of their science Teaching. Then the calculated value 2.74 is greater than table value 2.58 at 0.01 level of significance. The mean scores of urban area students are greater than the rural area students in respect to their locality of school. The mean scores of impact of science teaching of uneducated parents (85.37) are greater than educated parents (83.56). Hence it is concluded that there is a significant difference between the mean scores of Primary school students has better improvement, using Audio, Visual and Kinaesthetic learning styles in classrooms, in terms of their sex, Locality of school and Parental Education.

### FINDINGS OF THE STUDY

- The mean scores of male and female students has equal life styles. The mean scores of urban area students are greater than the rural area students in respect to their locality of school. The mean scores of life styles of uneducated parents are greater than educated parents. Hence it is concluded that there is a significant difference between the mean scores of learning styles of Primary school students in terms of their sex, Locality of school and Parental Education. So most of students has better achievement using visual learning styles in classrooms.
- There is a significant difference between the mean scores of impact of science teaching of Primary school students has better improvement, using Audio, Visual and Kinaesthetic learning styles in classrooms, in terms of their sex, Locality of school and Parental Education.

### CONCLUSION

A better knowledge and understanding of learning styles may become important as classroom sizes increase and as technological advances continue to mold the types of students. While research in this area continues to grow, teachers should make concentrated efforts to teach in a multi-style fashion that both reaches the greatest extent of students in a given class and challenges all students to grow as learners. It is very important to understand and explore each individual's learning style. Analyzing one's own particular learning style can be very helpful and beneficial to the student by aiding them in becoming more focused on an attentive learner, which ultimately will increase educational success. Discovering this learning style will allow the student to determine his or her own personal strengths and weaknesses and learn from them. Teachers can incorporate learning styles into their classroom by identifying the learning styles of each of their students, matching teaching style to learning style for difficult tasks, strengthening weaker learning styles through easier tasks and drill, and teaching students, learning-style selection strategies. Accommodating teaching to learning styles improves students' overall learning

results, increases both motivation and efficiency and enables a positive attitude towards the science being learned. The purpose of using learning styles is to find the best ways for both students to learn effectively and teachers to teach efficiently.

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